

REMOTE PARTICLE COUNTER FOR REMOTE MEASUREMENT  
OF THE NUMBER AND SIZE DISTRIBUTION  
OF SUSPENDED FINE PARTICLES IN THE ATMOSPHERE

ABSTRACT OF THE DISCLOSURE

5           A remote particle counter comprising a pulsed laser  
generator, laser light emitting optics, scattered light  
collecting optics, a high-sensitivity two-dimensional photo  
detector as a scattered light detecting portion having a  
fast gating capability such as a CCD camera, and a control  
10 and measure system, wherein suspended fine particles  
forming aerosols in the atmosphere which are far away from  
the site of laser emission are illuminated with laser  
light, the resulting backward scattered light from the  
individual fine particles is detected as image, and the  
15 number and size distribution of the suspended fine  
particles are measured at a remote site.